

SUBSTITUTE ABSTRACT

A rotary compressor is provided that has two compression capacities in clockwise and counterclockwise rotational directions. The rotary compressor includes a driving shaft that is rotatable in both clockwise and counterclockwise directions, and that has an eccentric portion. The compressor also includes a cylinder having a predetermined inner volume, and a roller rotatably installed on an outer circumferential surface of the eccentric portion so as to contact an inner circumferential surface of the cylinder. The roller performs a rolling motion along the inner circumferential surface of the cylinder and forms a fluid chamber therewith. A vane is elastically installed in the cylinder, contacting the roller, and upper and lower bearings are respectively installed at upper and lower portions of the cylinder to rotatably support the driving shaft and hermetically seal the inner volume of the cylinder. Suction and discharge ports communicate with the fluid chamber so as to suck and discharge fluid, and a suction plenum communicates with the suction ports and stores fluid for suction. A compression mechanism forms different sizes of compressive spaces in the fluid chamber based on a rotational direction of the driving shaft.